



**The British  
Psychological Society**

East Midlands Branch



BPS East Midlands Branch

# **Psychology presence in the Midlands 2017**

**Abstracts Booklet (by surname)**

**University of Derby**

Wednesday 13 September 2017

# **Attention and arousal regulation: comparison between clinical and subclinical traits of Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD)**

Alessio Bellato, Iti Arora, Chris Hollis, Danielle Ropar and Maddie Groom

*University of Nottingham*

## **Objectives/purpose:**

During this presentation, I will present results of my literature review about attentional and arousal regulation abilities in people with ASD, ADHD, with comorbid ASD & ADHD, but also about how these difficulties are modulated by subclinical personality

## **Design:**

Specifically, I will explain how differences in the development and functioning of brain networks for regulating attention and arousal regulation may contribute to the emerging of symptoms of these disorders during childhood, but also to slight difficulties in the general population.

## **Background:**

Paying attention to the world is a complex ability that develops very early during life, it is crucial to understand what's going on in the world, and it is impaired in individuals with developmental conditions, e.g., Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorders (ADHD). There are also some people who have these difficulties, even though they do not have any diagnosis, since it is likely that the characteristics and behaviours that occur in people with psychological or psychiatric conditions are also present at different levels among the general population.

## **Methods:**

I will present the experimental task I will be using during my PhD, to assess attentional abilities in people with ADHD, ASD and comorbid ASD & ADHD.

Conclusions:

Finally, I will describe potential impact of these findings, and future plans for my PhD project.

# **‘Understanding Autism, Asperger’s & ADHD’: impact of a psychology MOOC**

Simon Bignell  
*University of Derby*

## **Objectives/purpose:**

This paper analyses outcomes and feedback from the University of Derby Psychology ‘MOOC’ (Massive Open Online Course) ‘Understanding Autism, Asperger’s & ADHD’ which was taken by over 12,000 learners in June 2016.

## **Design:**

Interventions and support for children with autism, and their parents is especially poor in Derby and across the Midlands. Derby City Local Authority was recently directly criticised in Parliament for their local provision and following an allparty parliamentary review of autism, the Government has launched an Educational Inquiry. In a recent survey, The National Autistic Society found that although awareness of autism is good, understanding of autism and related conditions is poor. This massive open online course aimed to bring evidence-based information and quality content to engage the public understanding of these interrelated conditions.

## **Methods:**

Qualitative methods were used to analyse the feedback from enrolled learners via feedback forms and forum activities.

## **Results:**

Stakeholder interviews, special schools, parents and professionals were video interviewed to produce engaging professional content. Feedback suggested that the accessibility of the content, in terms of writing for a general audience, rather than an academic one and multimedia content were of value to learners and reportedly of profound value to some parents of recently diagnosed children with autism and ADHD.

## **Conclusions:**

The course, which was endorsed by The ADHD Foundation, had a wide positive impact both across the Midlands and further afield; enrolling learners from the local region and over a dozen countries. The course

paved the way for the creation of two follow-on courses aimed at further understanding autism for parents and professionals.

# **Understanding speech: Variability in the benefits obtained from visual speech information when the audio intelligibility of the talker varies**

Catherine L. Blackburn  
*Nottingham Trent University*

## **Objectives/purpose:**

This study aimed to address whether the level of benefit obtained from visual speech information changes if the audio intelligibility of the talker changes.

## **Design:**

Participants with normal hearing were asked to listen, or watch and listen, to sentences spoken by four different target talkers (two male and two female). The speech was presented as clear or as sine-wave vocoded to simulate the speech processing in a cochlear implant.

## **Background:**

Perceiving speech in background noise presents a significant challenge to listeners, particularly to individuals fitted with cochlear implants. However, seeing the face of a talker (visual speech) is known to improve speech perception. It is possible however, that benefits from visual speech information might vary according to the audio intelligibility of the target talker.

## **Methods:**

An opportunity sample of 24 students took part in the study. Participants were presented with 20 sentences in each of the 16 conditions (four talkers x clear or vocoded speech x audio or audio-visual). Speech was presented in background noise, which consisted of 16 talkers. The level of the background noise was varied adaptively to obtain a Speech Reception Threshold for each participant for each condition.

## **Results:**

There was significantly larger visual speech benefit for vocoded over clear speech ( $p < 0.01$ ), and the amount of visual speech benefit differed significantly across talkers ( $p < 0.01$ ). The amount of benefit generally increased as the audio intelligibility of the target talker decreased.

### Conclusions:

These results have implications when conducting new research, when replicating other studies, as well as for assessment of performance of cochlear implant users; the audio intelligibility of the testing stimuli should be considered to enable accurate assessment of performance.

# **“I'll tell you the truth, I'm not wealthy at all”: Using discursive psychology to explore talk about family wealth by the children of the super- rich**

Philippa Carr, Simon Goodman and Adam Jowett  
*Coventry University*

Objectives/purpose:

How do children of the super-rich present their wealth and privilege?

Design:

A qualitative research design was used for this study employing discourse analysis. This allows for the exploration of how individuals use the presentation of their identity to manage their accountability.

Background:

Economic inequality has a negative impact upon society. Inherited wealth acts to maintain inequality and the presence of super-rich individuals is challenging to a meritocratic society. However, social psychology has yet to examine how people with inherited wealth talk about their status.

Methods:

30 hours of non-subscription terrestrial television data was gathered throughout 2016 that included the term, super-rich. Discursive Psychology influenced discourse analysis was used which allows the exploration of how ideology and psychological concepts are used by individuals in their talk.

Results:

Individuals justify their status by constructing a worker identity to present their privilege as earned. In contrast, individuals minimise their role as a child of the super-rich to downplay the positive benefits of the financial and social capital they receive from their families.

Conclusions:

Speakers present themselves as effortful workers which allows them to use meritocratic arguments to legitimise their status. Individuals use a



'work hard, play hard' idiom in their talk to manage their accountability for the use of their leisure time. This allows heirs to present themselves as fair whilst orienting to criticism from others who are constructed as unreasonable for objecting to their privilege.

# **“I became a stats mentor because I know how daunting research methods and statistics can be”. Evaluating the stats mentor programme**

Rosalyn M. Collings, Kimberley Hill and Natalie Azoulay  
*University of Northampton*

## **Objectives/purpose:**

The objective of the Stats Mentor project was to offer peer mentoring bespoke to Psychology and Statistics Anxiety. The purpose of the study was to evaluate the impact of the Stats Mentor intervention in relation to both the mentees and the mentors' experiences.

## **Design:**

The Stats Mentor project is in its infancy and as a pilot intervention, evaluation was conducted via in depth qualitative semi structured interviews post academic year.

## **Background:**

Within psychology many students reportedly experience statistics anxiety with large proportions failing to make the connection between learning a science subject and conducting and analysing research (Onwuegbuzie & Leech, 2003). The current project employs second and third year psychology students, who have an interest in psychological science research, to provide mentoring to first and second year students in order to enhance levels of support and confidence whilst decreasing anxiety.

## **Methods:**

Three mentors and three mentees (ongoing data collection) were interviewed after mentoring had stopped for the summer. Interviews were analysed using thematic analysis to consider any particular themes relating to motivations for engaging in the project, potential benefits and barriers.

## **Results:**

Initial results indicate that mentors themselves had often experienced difficulties with research methods and wanted to help others. External motivations for becoming a mentor were rarely mentioned. Mentors did have concerns about unreasonable expectations from mentees and their own time and confidence. Mentees expressed the desire for a mentor to

decrease their levels of anxiety and discussed the beneficial impact leading up to the exam. Data collection closes on the 8 August 2017.

#### Conclusions:

The findings of this research will be used to shape the future of the scheme. Additionally the findings could inform forthcoming research surrounding statistics anxiety as well as have practical implications for future mentoring schemes within Higher Education.

# **Investigating the effect of exercise, cognitive and dual-task interventions upon cognitive function in type 2 diabetes mellitus: A systematic review and meta-analysis**

Samuel Cooke<sup>1</sup>, Arwel Jones<sup>1</sup>, Chris Bridle<sup>1</sup>, Mark Smith<sup>3</sup>, Kyla Pennington<sup>1,2</sup> and Ffion Curtis<sup>1</sup>

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*<sup>2</sup>School of Psychology, University of Lincoln*

*<sup>3</sup>School of Sport and Exercise Science, University of Lincoln*

## **Objectives/purpose:**

Whilst exercise, cognitive, and dual-task interventions have been shown to improve cognitive function within a healthy aging population, it remains unclear as to what effect such interventions may have in a type 2 diabetes mellitus (T2DM) population.

## **Design:**

Systematic review/meta-analyses.

## **Methods:**

Databases (PubMed, EMBASE, CINAHL, Web of Science, ClinicalTrial.gov, Cochrane register of controlled trials, Prospero, HTA, and DARE) of published, unpublished, and ongoing studies were searched for randomised controlled trials investigating the effect of exercise, cognitive and dual-task interventions upon cognitive function in T2DM.

## **Results:**

This review identified three studies investigating the effects of an exercise intervention and one study investigating the effect of a cognitive intervention upon cognitive function in T2DM. Meta-analyses indicated a significant effect of exercise for improving global cognitive function (minimal state examination  $P < 0.05$ ) and inhibitory control (Stroop task  $P < 0.05$ ) but not working memory (digit symbol  $P = 0.35$ ). Calculated effect sizes of outcome measures in the cognitive study indicated a beneficial effect of cognitive training upon cognitive function in T2DM. The risk of bias assessment in this review was hindered predominantly by poor reporting practices of included studies. Due to incomplete reporting of

methodological procedures, two studies were judged to have a high risk of overall bias whilst the remaining two were judged as having a moderate overall risk of bias.

#### Conclusions:

The findings of the present systematic review and meta-analyses provide evidence for exercise and cognitive interventions improving cognitive function in T2DM. The poor reporting practices of included studies means that future research in this area should identify relevant reporting guidelines (e.g. CONSORT) to reduce the risk of bias and facilitate transparent reporting.

# **A study into the predictors of eating disorders: Difficulties in emotion regulation, self-criticism, perfectionism and fears of compassion, using a mediation-moderation analysis**

Bryony S. Dale and Rosalyn M. Collings  
*University of Northampton*

## **Objectives/purpose:**

The current study focuses on building a path model which predicts disordered eating patterns from four variables that have previously been identified as risk factors within the eating disorder literature.

## **Design:**

The current study adopted a cross sectional quantitative correlational design with individuals who did not identify as having an eating disorder.

## **Background:**

Eating disorders are conceptualised as multi-determined disorders that develop due to many different potential contributing factors (Brotman & Herzog, 1991). Two of the consistent predictors of eating disorders are emotion regulation (Racine & Wildes, 2015) and perfectionism (Sassaroli et al., 2008). Linked to perfectionism self-criticism has also been considered a major factor in eating disorder development (Fennig et al., 2008). As a relatively new construct the current study considers if self-compassion may be able to moderate some of the risk factors and buffer the impact on eating disordered behaviour.

## **Methods:**

433 participants were recruited via social media and completed five pre-existing validated questionnaires to collect data: The Eating Disorder Examination Questionnaire 6.0, Fears of Compassion Scale, Forms of Self-criticising/attacking and Self-Reassuring Scale, Frost Multidimensional Perfectionism Scale and the Difficulties in Emotion Regulation Scale short form. Two mediator models and two mediated moderator models were proposed and analysed.

## **Results:**

Findings indicated that both self-criticism and perfectionism significantly predict disordered eating. Perfectionism mediates the relationship

between self-criticism and disordered eating as well as difficulties in emotion regulation and disordered eating and finally, fears of compassion moderate the relationship between self-criticism and disordered eating.

#### Conclusions:

The current study indicated strong relationships between the main explanatory variables identified in the literature (self-criticism, perfectionism and emotion regulation) as well as a moderating effect of self-compassion. The path model highlights the buffering impact of self-compassion which may help in the targeting for treatments and interventions.

# **The negotiation of feminine positioning's as a tattooed woman**

Charlotte Dann, Jane Callaghan and Evangelia Prokopiou  
*University of Northampton*

## **Objectives/purpose:**

I am interested in the ways that tattooed women negotiate femininities, and how they both conform and resist to normative constructions of femininities within a UK context.

## **Design:**

I used an intersectionally-informed qualitative design to explore these issues, through the use of semi-structured interviews.

## **Background:**

The pressure on women to conform to prevailing societal norms encompassing the idealised body is largely circumscribed via media influence, continuous body maintenance and visible body attributes.

Femininity and being feminine are imbued with expectations on how to dress, act and behave. However, what can be said is that tattoos are not often associated with typical constructions of femininity. Femininity is not a 'one size fits all' concept – there are many ways of embodying femininities.

## **Methods:**

Participants were selected using stratified sampling, to ensure that the right participants (i.e. tattooed women) were used to obtain the relevant information – in total, 14 women were interviewed. I used discourse analysis to analyse the obtained data, seeing what has been produced within the interviews.

## **Results:**

A key discourse that was produced centred on the variability in feminine positioning's, and tensions arose between productions of femininity and the tattooed feminine body.



### Conclusions:

Femininities and their representations are complex, with multiple personal and societal positioning's being considered in relation to being a tattooed woman. This is part of a larger PhD thesis that focuses on the regulation of the tattooed feminine body and explores conformity versus resistance to normative constructions. The complexities of intersectional positioning needs further acknowledgement and exploration.

# **Impact of the paws b mindfulness programme on children's resilience and affect**

Mary T.A. Doran and Rosalyn M. Collings  
*University of Northampton*

## **Objectives/purpose:**

This study examined whether mindfulness as an intervention could be used to improve resilience and positive affect levels with preadolescent children, while reducing negative affect.

## **Design:**

The current study utilised a wait list control pre-post experimental method whereby participants completed validated measures before the mindfulness intervention and after. Those on the wait list were offered mindfulness after the completion of the study.

## **Background:**

Children and young people's mental health is a subject of increasing concern with 50% of mental health disorders beginning before the age of 14 (WHO, 2013). Research focusing on mental health of pre-adolescent children is very rare however. Anxiety and depression have a strong comorbid relationship, with negative affect correlating strongly with both. Resilience is also known to be a moderator of anxiety and depression levels.

## **Methods:**

26, 11-year old children completed the paws b mindfulness programme, a six week programme developed for 7-11 year olds by Silverton and Sawyer in collaboration with MISP. Participants were assessed on levels of negative and positive affect as well as resilience pre and post intervention and were compared to a control group (n = 27) from the same school.

## **Results:**

Mixed factorial ANOVA found that the mindfulness intervention effects had only small effect sizes indicating little impact of the intervention. Participants from the intervention group completed an evaluation questionnaire post intervention. Analysis of this showed very positive

acceptability effects and evidence of perception of mindfulness having a positive moderating effect on stressful events.

#### Conclusions:

The findings imply little impact of the mindfulness intervention within this sample although issues of statistical power and contagion effects are discussed. Further research is needed in order to explore with more depth and accuracy, effective methods of measuring the impact of mindfulness on children's resilience and mental health.

# **The DSM-5 alternative model for personality disorders; Assessing the psychometric properties of two screening instruments (SIPP-SF and PID-5-BF) in a UK, male sample**

Jackie Hamilton, Belinda Winder, Nicholas Blagden, Jason Pandya-Wood and Kerensa Hocken  
*Nottingham Trent University*

## **Objectives/purpose:**

The purpose of the study was to validate the Severity Indices of Personality Problems Short Form (SIPP-SF) and the Personality Inventory for the DSM-5 Brief Form (PID-5-BF) in a UK male sample, with the intention of later using the scales to screen for Personality Disorders (PDs).

## **Design:**

A survey design was used to collect data from factories/ warehouses/ garages/ trade jobs.

## **Background:**

The DSM-5 includes an alternative dimensional model for PDs, which contains two main criteria; personality functioning (A) and pathological personality traits (B). However, there are minimal screening tools that assess these criteria. The SIPP-SF has been found to be a good measure of Criteria A, and the PID-5 Brief Form (BF) has been found to be a reliable measure of Criteria B, nevertheless, they have not been used in the UK.

## **Methods:**

Participants consisted of 156 males, working in factories, warehouses, and trade jobs (a specific group of males were targeted in order to get a sample with similar demographics as would be expected from a forensic sample). Participants completed the SIPP-SF, PID-5-BF, and Personality Diagnostic Questionnaire-4 (PDQ-4). Reliability and validity analysis consisted of; internal consistency, discriminant validity, criterion validity, and confirmatory factor analysis (CFA).

### Results:

The PID-5-BF and SIPP-SF demonstrated good internal reliability. Discriminant validity correlations of the PID-5-BF showed mainly small or moderate correlations, whereas, the SIPP-SF generally showed moderate or large correlations. CFA results of the PID-5-BF indicate a five factor model, with the absolute fit indices suggesting adequate model fit. The PID-5-BF domains were all significantly correlated with theoretically explained PDs, likewise, each of the PDs were associated with the theoretically expected SIPP-SF domains.

### Conclusions:

Overall, these results indicate that the PID-5-BF and SIPP-SF may be promising screening instruments for Criteria A and B.

# **The mediating impact of alexithymia, self-compassion and self-criticism in the child abuse and NSSI relationship**

Siobhan N. Horgan and Rosalyn M. Collings  
*University of Northampton*

## **Objectives/purpose:**

The current research aimed to investigate the relationship between different forms of child abuse and trauma and non-suicidal self-injury (NSSI), and the possible mediating effect of alexithymia, fear of self-compassion and self-criticism on this relationship. It also aimed to investigate whether the mediating factors were more prevalent in NSSI populations than control populations.

## **Design:**

The current study adopted a cross sectional quantitative correlational design with individuals who did and did not disclose episodes of NSSI.

## **Background:**

NSSI remains a world-wide public health concern (Hawton, 2002). Childhood abuse trauma has been identified as one of the main predictors of NSSI, although the relationship between the two remains unclear (Glassman et al., 2007). Extensive research into the functions of NSSI have identified emotion regulation, communication and self-punishment. Therefore it is hypothesised that alexithymia (inability to describe emotions and feelings), self-criticism and a lack of self-compassion may mediate the relationship between trauma and NSSI.

## **Methods:**

119 participants (NSSI sample  $n = 78$ ; control sample  $N = 41$ ) completed pre-validated and reliable questionnaires; the Child Abuse & Trauma Scale, Inventory of Statements about Self Harm, Revised Toronto Alexithymia Scale, Forms of Self Criticism Scale & the Fear of Compassion scales. The study was completed online using social media. Mediation analysis was conducted to assess the predicted path model.

## **Results:**

Results indicated that NSSI was predicted by sexual abuse, neglect and “unspecified abuse”. Emotional and physical abuse did not predict NSSI.

The control group were significantly lower on all variables. Alexithymia, self-criticism and fear of compassion all mediated the relationship between childhood trauma and NSSI.

#### Conclusions:

The findings indicate that therapeutic techniques may wish to concentrate on raising levels of self-compassion (Gilbert, 2006) as well as CBT strategies to enhance individuals understanding of their own emotions and ACT metaphors to decrease self-criticism.

# **Exposure to intergroup conspiracy theories promotes generalised prejudice**

Daniel Jolley, Rose Meleady and Karen Douglas  
*Staffordshire University*

## **Objectives/purpose:**

The current research aims to investigate the causal link between conspiracy theories, prejudice and discrimination.

## **Design:**

In Study 1 and 2, participants were exposed to conspiracy theories about a social group or information refuting (anti-conspiracy) or nothing (control). In Study 3, participants were exposed to conspiracy theories about a social group or nothing (control).

## **Background:**

Correlational research has indicated that conspiracy beliefs appear to be connected to prejudice and negative attitudes toward target groups. Using experimental designs, this project aims to uncover the casual link.

## **Methods:**

In Study 1 (N = 166), participants were exposed to conspiracy theories about immigrants (vs. anti-conspiracy or control), before indicating their belief in conspiracy theories and prejudice towards immigrants. In Study 2 (N = 173), participants were exposed to conspiracy theories about Jewish people (vs. anti-conspiracy or control), before indicating their belief in conspiracy theories, prejudice towards Jewish people and intention to vote for a Jewish political candidate. In Study 3 (N = 113), participants were exposed to Jewish conspiracy theories (vs. control) and then indicated their belief in conspiracy theories, prejudice towards Jewish people and unrelated groups (e.g., Americans, Arabs).

## **Results:**

In Study 1, exposure to conspiracy theories about immigrants increased prejudice towards immigrants; an effect explained by increased endorsement in immigrant conspiracy theories. In Study 2, exposure to conspiracy theories about Jewish people reduced participants' willingness to vote for a Jewish political candidate, via increased belief in Jewish conspiracy theories and increased prejudice towards Jewish



people in turn. In Study 3, we show that exposure to the same conspiracy theories increased prejudice not only towards this target group but also to other unrelated groups.

#### Conclusions:

This work empirically demonstrates that conspiracy theories can have increase prejudice towards implicated groups and that this prejudice can then generalise to other unrelated outgroups.

# Dementia care and kinship

Elizabeth Peel  
*Loughborough University*

## Objectives/purpose:

To explore the accounts of adult children caring for a parent with dementia.

## Design:

I draw on data from the British Academy funded 'Duties to Care' and 'Dementia Talking' projects and focuses on challenges identified by adult children when caring for a parent with dementia.

## Background:

It is well documented that caring for a person living with dementia is stressful and generates depression and anxiety, but much research focuses on heterosexual spousal carers.

## Methods:

I draw on data collected via semi-structured interviews and focus groups conducted with 11 adults caring for either a mother (n=9) or a father (n=2) with dementia. The mean age of participants was 58 (range 47-65).

## Results:

Using thematic discourse analysis I examine the accounts of interactions with the person living with dementia that fracture or reconfigure normative familial relationships. I also discuss sibling conflict and collaboration alongside how these caring dynamics are mediated by gender, social class, and locus of care (e.g., quotidian or remote).

## Conclusions:

In conclusion, my analysis suggests that, in the absence of a primary spousal carer, caring for a person living with dementia can necessitate particular issues for adult children that trouble notions of how we understand familial roles, responsibilities and 'duties'. I suggest that foregrounding the experiences of this sub-set of carers may offer a critical lens on family dynamics and the processes and practices of caring more broadly.

# **What are the patient reported facilitators and barriers to physical activity following pulmonary rehabilitation in chronic obstructive pulmonary disease (COPD)? A systematic review of qualitative research**

Hayley Robinson<sup>1</sup>, Veronika Williams<sup>2</sup>, Christopher Bridle<sup>1</sup> and Arwel W Jones<sup>1</sup>

*University of Lincoln<sup>1</sup>, University of Oxford<sup>2</sup>*

## **Objectives/purpose:**

This study aimed to determine and understand COPD patients' perceived facilitators and barriers to physical activity after completion of pulmonary rehabilitation. Pulmonary rehabilitation, a multidisciplinary treatment for COPD incorporating exercise trail.

## **Design:**

A systematic review of qualitative research.

## **Methods:**

Electronic databases of published, (MEDLINE, Embase, Web of Science, CINAHL, ASSIA, PsycINFO and SPORTDiscus), non-published data and conference proceedings (DART Europe E theses, EThOS, Open Grey, The New York Academy of Medicine, ProQuest Dissertations and theses), and trial registers (ClinicalTrials.gov and Current Controlled Trials) were searched to identify qualitative studies (interviews, focus groups) including COPD patients following pulmonary rehabilitation. Qualitative data relevant to the research question were synthesised using an inductive, thematic approach.

## **Results:**

14 studies (n= 12 published articles, n= 2 theses) including 167 COPD patients (male = 92, female = 75) met the inclusion criteria. Analytical themes were beliefs, motivation and social support, which encapsulated the facilitators and barriers to physical activity following pulmonary rehabilitation. Facilitators included positive intentions, support from health care professionals (HCPs), positive feedback regarding health, access and opportunities to attend physical activity maintenance groups, peer and family interaction. Barriers included negative beliefs, lack of

support from HCPs and peers, as well as practical issues surrounding travel and home responsibilities following pulmonary rehabilitation.

#### Conclusions:

Our findings reflect the complexity of physical activity behaviour and provide implications regarding the importance of continued social support and feedback in the maintenance of physical activity. These factors should be considered in the development of future interventions that target physical activity following pulmonary rehabilitation in patients with COPD.

# **Belief in conspiracy theories and white collar crime behaviours**

Tanya Schrader, Daniel Jolley, Karen Douglas and Ana Leite  
*Staffordshire University*

## **Objectives/purpose:**

The current study tests the potential relationship between the endorsement of conspiracy theories and White Collar Crime (WCC) behaviours.

## **Design:**

Using a correlational design, participants completed a survey measuring conspiracy theory endorsement, personality traits that are known to predict WCC such as honest-humility and also a measure of moral identification, where each was employed as predictor variables. Indications of previous WCC behaviours, alongside future intentions to engage in WCC, were completed as criterion variables.

## **Background:**

WCC can include activities such as fraud (e.g., tax evasion) and embezzlement (e.g., misappropriation of money) and costs the UK economy billions a year. It is, therefore paramount that we understand the drivers of why a person may commit WCC behaviours. Emerging research highlights the negative impact that conspiracy theories – which point accusing fingers at a malign (usually powerful) few – can play in society, including unethical work behaviour. We predicted that alongside other known personality predictors of WCC, belief in conspiracy theories would play a unique role in predicting WCC behaviours.

## **Methods:**

Participants (N = 253) completed measures of conspiracy theories, both of mindset and belief in the real world. In addition, known personality predictors of WCC were completed alongside a moral identification measure. Finally, participants indicated both their actual behaviour and future intentions to engage in WCC.

### Results:

Hierarchical regression analyses determined belief in conspiracy theories, alongside the personality traits of honest-humility and extraversion were significant predictors of both actual and intentions to engage in WCC behaviours.

### Conclusions:

This study provides the first empirical evidence that belief in conspiracy theories may play a role, alongside other personality traits, in predicting people's past and future WCC behaviours.

# **The effects of increased motor load on auditory perception in real life settings using mobile EEG**

Charlotte Scott, Nicola Johnstone and Annette Sterr  
*Loughborough University*

Objectives/purpose:

Does performance on a cognitive task decline as a function of increased motor load?

Background:

Cognitive Load Theory researchers are interested in the effects of Cognitive-Motor Interference using Dual-Task paradigms. Specifically, researchers have identified decreases in behavioural performance and the amplitude of the P300 Event Related Potential (ERP) as a function of increased motor load from seated to walking (De Vos, Gandras & Debener, 2014), indicative of diminished attentional function to meet task demands. However, no research has been conducted examining the effects of different walking styles on attentional function.

Methods:

Using the Smarting Mobile EEG device, 20 participants performed a three-stimulus auditory oddball task under three conditions (repeated measures) (1) Seated, (2) Walking following the experimenter (Imposed walking) and (3) Walking in a direction and pace as determined by the participant (Un-Imposed walking).

Results:

Reaction times were faster, the prevalence of hits higher and false alarms were lower in the seated condition versus walking conditions. Participants made more false alarms in the Un-Imposed versus Imposed condition, however no other behavioural differences were identified between walking conditions. No significant ERP differences were identified between conditions.

Conclusions:

As motor load increases from seated to walking, behavioural performance on an auditory oddball task decreases. Further, when participants are self-directed, more errors are made than when participants are led, indicating limited attentional allocation to meet task demands. The ERP results highlight the caveats of mobile EEG

applications, rather than contradict behavioral outcomes. Future mobile EEG studies should be mindful of data quality in order to gain a more insightful picture of brain function in real life settings.



# **Interventions to reduce sickness absence within a healthcare population: A systematic review**

Laura Simmons, Christopher Bridle and Niro Siriwardena  
*University of Lincoln*

## **Objectives/purpose:**

To identify and synthesise evidence on interventions that reduce sickness absence within healthcare employees and provide information on the effectiveness of these interventions.

## **Design:**

A systematic review was performed to identify interventions that reduce sickness absence within healthcare employees.

## **Background:**

The rate of sick leave in healthcare employees has been increasing with the ambulance service, nurses and support workers demonstrating the highest levels of absence across the NHS. Therefore, it is important to assess the effectiveness of interventions to reduce sickness absence among healthcare employees.

## **Methods:**

Database searches were conducted (MEDLINE, CINAHL, PsycINFO, Web of Science and EMBASE) to access randomised control trials that aimed to reduce sickness absence. The inclusion criteria were English language articles with participants who were employed in the healthcare sector. The primary outcome was a change in sickness absence categorised as either the duration of sickness (i.e. the number of days off sick) or the number of absences over a certain time period. Data were extracted using a modified Cochrane data extraction form and the risk of bias for each study was calculated.

## **Results:**

A total of seven studies were found to meet the inclusion criteria, which included four exercise interventions, two influenza vaccination interventions and one process consultation intervention. The review found that only one exercise intervention (Tai Chi) and the influenza vaccinations were able to demonstrate a reduction in sickness absence.

### Conclusions:

The initial findings suggest that there is a lack of evidence to demonstrate the effectiveness of exercise interventions in reducing sickness absence. Exercise-based interventions are often effective in improving health-related outcomes, however, it is evident that this may not be applicable to sickness absence. This is an ongoing systematic review and we hope to be able to combine the studies into a meta-analysis.

# Managing type 1 diabetes: A qualitative study of young adults' experiences

Michael Swift and Anatoli Karypidou  
*Newman University*

## Objectives/purpose:

This study aimed to explore young adults' experiences of self-managing Type 1 diabetes Mellitus.

## Design:

A purely inductive qualitative approach was employed.

## Background:

The prevalence of Type 1 diabetes Mellitus is increasing within the young adult population and is associated with severe complications. Current research suggests young adults with Type 1 diabetes consistently report poor self-management controls than older diabetic groups.

## Methods:

Seven participants aged between 18-25 were recruited via purposive snowball sampling. Self-constructed semi-structured telephone interviews were conducted and thematic analysis of the data was applied following BPS and institutional ethical guidelines.

## Results:

7 themes were identified:

- Major lifestyle change: The impact of the illness causing several daily life changes.
- Daily management: The practical applications of self-management (injections, exercising).
- Emotional impact: Expressive factors of self-management such as anxiety, fear and frustration.
- Coping Mechanisms: Emotional and problem focused mechanisms that impact medical adherence and self-management.
- Support: Support networks such as family, health care professionals and the role of support groups for experiential learning.

- Education: Health campaigns and the role of stigma within diabetes.
- Personal Development: Self-awareness and personal growth as positive outcomes of self-management.

#### Conclusions:

The research gained insight into the self-management controls and the experiences of diabetes upon participants social and emotional well-being. The research suggests the need for future interventions that are tailored to the needs of young Type 1 diabetics; primarily through education, training and through providing support groups for experiential learning and emotional support.

# **An exploration into the counselling experiences of university students with Autism Spectrum Conditions: Implications for psychologists**

Nicky Toor

*University of Manchester*

## **Objectives/purpose:**

To create insight and understanding as to how to work to with university students with Autism Spectrum Conditions (ASC) which in turn may have important social, emotional and educational consequences.

## **Design:**

This study adopted a qualitative thematic analysis methodology.

## **Background:**

While many young adults identified with ASC intend to go to college and/or university, research suggests that these individuals can find aspects of such a transition challenging. Further, having access to immediate support, such as counselling and psychological therapy, is reported as an important factor to these individuals. This project explored this relationship further.

## **Methods:**

Participants were selected using a purposive sampling method. This study presents the counselling experiences of 10 university students with ASC whilst they studied at college or university. Semi-structured interviews were conducted and the transcripts were analysed using thematic analysis to identify salient and frequent themes.

## **Results:**

Thematic analysis of the data identified three major themes:

- the therapeutic relationship as the foundation for counselling students with ASC;
- the student-perceived value of the counselling process;
- factors influencing the provision of an accessible and inclusive counselling service.

### Conclusions:

The findings provide a valuable insight into how counselling is experienced by students with ASC and highlight that it can be a valuable resource for these individuals. The provision of accessible services, that provide an individualised approach, can help to empower individuals with ASC to reach their potential in university and beyond.

# Bigram frequency and diversity: Two alternative measures of language processing

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Objectives/purpose:

Can bigram frequency and/or diversity predict word recognition performance?

Design:

Word-pairs (bigrams) were extracted from the British National Corpus and used in a suite of primed-lexical-decision tasks to investigate whether bigram frequency and diversity can predict task performance and whether these metrics can provide a credible alternative to current accounts of statistical learning.

Background:

It has been suggested that frequency and predictability have an effect on language processing. This has previously been side-lined in favour of transitional probability in statistical learning explanations. These are considered to be a robust indicator of performance in statistical learning paradigms but there is some question as to whether this holds for natural languages where words have very small transitional probabilities. The current study examines two alternative statistical metrics - bigram frequency and diversity - and compares them with transitional probabilities taken from a large corpus of natural language (BNC).

Methods:

97 participants aged 18-41 years were recruited from Nottingham, UK. The task was conducted as three separate experiments, participants took part in only one experiment. General trends were comparable for each task so data was pooled for the final analysis. Primed-lexical-decision tasks were run in OpenSesame and response-time data was collected for all participants. Stimuli were selected by extracted bigrams from the BNC and controlling on a number of dimensions including word-frequency, concreteness and length.

### Results:

Categorical analyses were conducted for frequency and diversity using repeated-measures ANOVA, these show that both metrics have an effect on task performance. A mixed-effects model has been used to demonstrate the individual contributions of predictors.

### Conclusions:

Bigram frequency and diversity can be used to predict task performance and may provide a credible alternative to transitional probability in statistical learning accounts of language.



# **Experiences and understanding of Dementia among prison staff and prisoners**

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## **Objectives/purpose:**

The aim of this study was to explore the understanding and experiences of dementia among prisoners and prison staff at HMP Whatton.

## **Design:**

A qualitative, interview study was used, in order to facilitate an in-depth exploration of participant's understanding and experiences of dementia.

## **Background:**

As the prisoner populations in prisons across the western world are ageing, the potential for an increased prevalence of dementia among prisoners is of growing concern. Despite this, a paucity of empirical research has explored the issue of dementia in prisons.

## **Methods:**

Audio-recorded semi-structured interviews were conducted with 16 male prisoners currently serving sentences at HMP Whatton, and 11 members of prison staff. Audio recordings of interviews were transcribed verbatim and an initial thematic analysis was conducted.

## **Results:**

From this preliminary analysis, four superordinate themes emerged.

The first theme was 'balancing act'. Participants emphasised the importance that several balances are maintained, when considering how best to support and manage men with dementia. The second theme was 'the danger of assumptions'. Participants highlighted a number of assumptions, which could potentially mislead staff, prisoners and their families alike, in their understanding of dementia and how to appropriately support an individual with dementia. The third theme was 'what works, and what doesn't work (in prison)'. Participants gave several examples of both helpful, and unhelpful situations and environmental conditions for people with dementia. The fourth theme was 'who to tell?'. An important issue, noted by participants, was

knowing who to inform about a dementia diagnosis or possible dementia in a prisoner.

#### Conclusions:

A list of practical recommendations relating to the support and management of prisoners at HMP Whatton has been generated, as a result of this research.

# **Making the invisible motorbike visible; An investigation into reducing look but fail to see errors at junctions**

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## **Objectives/purpose:**

The objective of this study is to develop an intervention utilising gamification and perceptual learning to increase the cognitive conspicuity of motorbikes at junctions, and thus potentially reducing the accidents and deaths at junctions.

## **Design:**

A 2x 3x 3 mixed design was employed in this study. The between-groups variable was the intervention (motorbike or fruit spot the difference and control condition), the within-groups variables were approaching vehicle (car vs. motorbike), distance of the approaching vehicle (near, intermediate, far). The dependent variable was the accuracy of reporting an approaching vehicle.

## **Methods:**

28 drivers were recruited for the study. Data was collected using the online platform Qualtrics. Each participant was randomly assigned to each condition. Participants were recruited via existing social networks. 2x3x3 Analysis of Variance (ANOVA) was conducted.

## **Results:**

After the intervention in the spot the difference motorbike group there was a significant distance x intervention interaction,  $F(4,30) = 7.16$ ,  $p < .001$ , indicating that the visibility of the vehicles across different distances differed according to the intervention that a participant completed. Repeated planned contrasts isolated the interaction to be between medium and far  $F(1,15) = 8.382$ ,  $p = .004$ . However, there was no significant effect of vehicle type, indicating no statistical difference in the detection between motorbikes and cars  $F(1,15) = 3.10$ ,  $p = .586$ . This shows that the motorbike spot the difference conditions not only improve the detection of motorbikes it also has the added effect of improving the detection of cars at far distance.

### Conclusions:

Further research is required to replicate these findings with a larger participant group. If the effect of this type of perceptual training in improving detection of both cars and motorbikes is replicated, then research into possible underlying mechanisms and conditions contributing to this should be explored, if possible even isolated.

# **The psychology behind the EU Referendum; It's about who you are (not just where you come from)**

Tara Walker  
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## Objectives/purpose:

This study aimed to investigate how factors which have been previously found to have an effect on political participation, identity and attitudes towards immigrants may have predicted voted behaviour in the 2016 European Union (EU) Referendum.

## Design:

An online survey (using Bristol Online Survey software) was used to test the theoretical model that honesty-humility, agreeableness, openness to experience, prejudice, British identity, European identity, preferred political party and political orientation (predictor variables) would predict voting behaviour, remain or leave (outcome variable).

## Background:

The EU referendum was one of the most significant political events of recent times, and psychology has previously been found to play a role in political differences and political participation, i.e. voting. Psychological factors such as prejudice and national identity have consistently been found to have an effect on voting behaviour and political participation in previous studies.

## Methods:

101 participants were recruited from all areas of the UK, aged from 18 – 80, to take part in the online survey study via existing social networks and Nottingham Trent University's SONA research system. Participants answered questions from pre-established scales around each factor of the model as well as indicating whether they voted leave or remain in the EU referendum.

## Results:

A logistic regression was used to analyse the data from the online survey. The results found that high scores of honesty-humility, prejudice

and British identity, low scores of European identity, and both left and right political orientation predicted the leave vote.

#### Conclusions:

The findings from this study suggest that prejudice from ingroup-outgroup relationships, along with national identity have wide reaching consequences, particularly in a political setting.

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